

**POLYMERIZATION OF ETHYLENE**

**Patent number:** JP10060043  
**Publication date:** 1998-03-03  
**Inventor:** MONOI HISASHI; TORIGOE HIDENOBU; YAMAMOTO MASAKAZU  
**Applicant:** NIPPON POLYOLEFIN KK  
**Classification:**  
- **international:** C08F4/69; C08F4/658; C08F10/00  
- **european:**  
**Application number:** JP19960220210 19960821  
**Priority number(s):** JP19960220210 19960821

**Abstract of JP10060043**

**PROBLEM TO BE SOLVED:** To efficiently obtain ethylene/1-hexene copolymer from only ethylene by using an ethylene polymerization catalyst and a specific cocatalyst. **SOLUTION:** Ethylene is polymerized in the presence of (A) an ethylene polymerization catalyst (e.g. a carried chromium catalyst or a catalyst system containing at least one transition metal selected from titanium, vanadium and zirconium) and (B) a cocatalyst comprising (i) a chromium amide compound, (ii) a solid inorganic oxide calcined at 500-900 deg.C, and (iii) an alumoxane (preferably an alkyl alumoxane). On the polymerization of ethylene, the component B for trimerizing the ethylene to produce 1-hexene and the component A for copolymerizing the ethylene with the 1-hexene can be used in an arbitrary ratio in order to obtain the copolymer having a necessary density. Thereby, the objective copolymer having a density of 0.910-0.945 is obtained from only the ethylene.

---

Data supplied from the **esp@cenet** database - Worldwide